

**ENGINEERING AND RELATED SERVICES
APRIL 8, 2011**

**CONTRACT NO. 4400001461
RETAINER CONTRACT FOR UNDERWATER ACOUSTIC
IMAGING FOR BRIDGE INSPECTION
STATEWIDE**

Under Authority granted by Title 48 of Louisiana Revised Statutes, the Louisiana Department of Transportation and Development (DOTD) hereby issues a Request for Qualification Statements (RFQ) on Standard Form 24-102 (SF 24-102), "Professional Engineering and Related Services", revised January 2003, from Consulting Firms (Consultant) to provide engineering and related services. **All requirements of Louisiana Professional Engineering and Land Surveying (LAPELS) Board must be met at the time of contract execution.** One Prime-Consultant/Sub-Consultant(s) will be selected for this Contract.

Project Manager – Ms. Haylye Brown

All inquiries concerning this advertisement should be sent in writing to Debbie. Guest@LA.gov.

PROJECT DESCRIPTION

The selected Consultant will provide underwater acoustic imaging for underwater bridge inspection of pier systems statewide.

SCOPE OF SERVICES

This is a contract for Underwater Acoustic Imaging for Bridge Inspection of bridge piers. The district will evaluate findings that appear to have a significant structural impact on the bridge, following normal DOTD bridge inspection procedures. Specifically, the Consultant/Team is to perform the following activities for each bridge indicated by the project manager. The Consultant will provide the following: an underwater acoustic imaging and profiling system, appropriate deployment systems and mechanisms for the acoustic imaging system, Real Time Kinematic GPS for geographic position determination of the sonar sensor, an attitude and heading reference sensor to orient the acoustic sensor, a boat for transportation and a work platform sufficient to ensure adequate sensor spacing away from the piers so as to be able to adequately acquire imagery and profile data of the pier, any sub-shafts and or caissons which require a horizontal offset from the pier on the surface. Also a diver investigation is required in the event that any anomalies are found, an adequate complement of acoustic crew personnel to ensure project performance and safety.

Acoustic Surveying Equipment Requirements

The Acoustic equipment shall be a multi axis, steered beam imaging and profiling remote sensing system as manufactured by Kongsberg-Mesotech, Ltd, or DOTD approved equivalent. All acoustic data shall be correlated to a Real Time Kinematic (RTK) GPS positioning system and adjusted for vessel motion in heading, pitch and roll.

Deliverables

The Consultant shall provide two copies of the Survey report describing the survey methodology employed in the field, including but not limited to, control, any calibrations, equipment used, a summary of all anomalies located, etc. Maps shall be stamped and signed by a surveyor licensed in the State of Louisiana, under whose direction the work was performed.

A paper report is to be prepared that will include the following data:

- a. Sketches that depict any significant deviations from as-built conditions.
- b. Structure Number
- c. Crossing Description
- d. Recall Number
- e. Depth
- f. Flow Rate
- g. Elements & Conditions
- h. Comments
- i. The results of the field survey and location of all anomalies.
- j. A set of drawings including a plan view showing all survey lines and transects anomalies and table listing coordinates of each anomaly.
- k. Sheets showing all cross sectional diagrams.
- l. A hard copy of the data sets.
- m. A copy of the field notebook records.
- n. Mosaic of scan for each pier/pier-wall for each pier-face as well as both upstream and downstream noses of the piers
- o. Close-up mosaic/scan of Anomalies

The Consultant shall submit a draft Underwater Inspection Report to DOTD within 30 calendar days after the completion of field operations for each bridge. The final report shall be submitted to DOTD within 30 calendar days after receipt of comments.

The Consultant shall provide four digital copies of the following electronic files (on separate CD/DVD):

- Complete final paper report in pdf format.
- One full set of all survey drawings in pdf formats.
- All data sets listing all points with horizontal coordinates (northings, eastings), corresponding elevations including all stations, PI's survey transects and break

lines and feature codes. Features shall be shown as break lines or cells and labeled in the drawing. This file listing shall be stored in a comma delimited ASCII format.

Inspections

The Consultant shall provide underwater inspection and evaluation of all piers and water conveying structures.

The Consultant will provide a self contained dive vessel, dive inspection crew, and inspection apparatus to effect further investigation of any acoustically observed deformities/anomalies near the pier.

Level 1 Concrete Piers & Walls by Acoustic Imaging: This inspection is designed to identify and locate any major damage or deterioration. Detailed investigation of selected areas of each location will be performed to identify signs of deterioration, such as corrosion, loss of section, missing or damage, scour undermining, or any other sign or indication of compromised structural integrity.

- Perform underwater bridge pier inspections utilizing acoustic imagery visualization of approximately 100 bridge piers that are submerged, to include both sides of the piers and the upstream and downstream noses of the piers.
- Perform close range in depth acoustic imaging and localized acoustic profiling of any observed abnormal features.
- River or stream water bottom topography immediately (100') upstream of the piers and immediately (100') downstream of the bridge piers will also be mapped.
- Scour impact as observed at the pier – water bottom interface will be profiled if scour prominence is indicated.
- The report will contain PONTIS element numbers and associated ratings for each element inspected. The Louisiana PONTIS reference manual can be requested via email from the Project Manager

Field Recordings and Data Processing

The Consultant shall have the ability to obtain data and to make proper assessments during real time data collection. Suspect areas will be reviewed along with still imagery with interpretations and will be shared with the DOTD before draft and final reports are submitted.

QUALITY CONTROL/QUALITY ASSURANCE

The DOTD requires the Consultant to develop a Quality Control/Quality Assurance program; in order to provide a mechanism by which all contracted services can be subject to a systematic and consistent review. Consultants must ensure quality and adhere to established design policies, procedures, standards, and guidelines in the preparation and review of all design products. The DOTD shall provide limited input and technical assistance to the Consultant.

CONTRACT TIME

The Consultant shall proceed with the services specified herein after the execution of this Contract and upon written Notice-To-Proceed from the DOTD. The overall contract time to complete this project is estimated to be **365 calendar days**. The delivery schedule for all project deliverables shall be established by the Project Manager.

COMPENSATION

Compensation to the Consultant for services rendered in connection with this Contract will be actual cost plus a negotiated fixed fee, with a maximum compensation limitation.

All travel related expenses will be compensated under direct expenses, and will be in accordance with Louisiana Office of State Travel regulations found at: <http://www.doa.louisiana.gov/osp/travel/travelpolicy.htm> Vehicle rental rates will require prior approval from the DOTD Project Manager.

Within 15 calendar days of notification of selection, a kick-off meeting will be held with the selected Consultant/Team and appropriate DOTD personnel. The selected Consultant/Team will be required to submit a proposal within 30 calendar days following the notification of selection. All negotiations must be completed within 60 calendar days following the notification of selection.

REFERENCES

All services and documents will meet the standard requirements as to format and content of the DOTD; and will be prepared in accordance with the latest applicable editions, supplements and revisions of the following:

1. AASHTO Standards, ASTM Standards or DOTD Test Procedures
2. DOTD Location and Survey Manual
3. DOTD Roadway Design Procedures and Details
4. DOTD Hydraulics Manual
5. DOTD Standard Specifications for Roads and Bridges
6. Manual of Uniform Traffic Control Devices
7. DOTD Traffic Signal Design Manual

8. National Environmental Policy Act (NEPA)
9. National Electric Safety Code
10. National Electric Code (NFPA 70)
11. DOTD Environmental Impact Procedures (Vols. I-III)
12. Policy on Geometric Design of Highways and Streets
13. Construction Contract Administration Manual
14. Materials Sampling Manual
15. DOTD Bridge Design Manual
16. Consultant Contract Services Manual
17. Geotechnical Engineering Services Document
18. Bridge Inspectors Reference Manual
19. DOTD Stage 1 Manual of Standard Practice
20. Code of Federal Regulations 29 CFR 1926 (OSHA)

MINIMUM PERSONNEL REQUIREMENTS

The following requirements must be met by the Prime-Consultant at the time of submittal:

1. At least one Principal of the Prime-Consultant must be a Professional Land Surveyor registered in the State of Louisiana.
2. At least one Principal or responsible member of the Prime-Consultant must be a Professional Land Surveyor registered in the State of Louisiana, with at least five years experience in conducting underwater acoustic surveys.
3. The Prime Consultant must also employ on a full-time basis, one Underwater Acoustic Imaging Inspection Project Manager with at least five years experience in managing underwater acoustic inspection projects.
4. In addition to the above requirement, the Prime Consultant must also employ on a full-time basis, or through the use of a Sub-Consultant(s):
 - a. Acoustic Field Team(s) each consisting of :
 - Team Leader (must meet NBIS qualifications)
 - Sufficient technical and mechanical personnel to properly perform survey
 - One Dive Team consisting of two divers and a tender, one of the divers being the job site diver supervisor. The Dive Team must meet NBIS requirements for underwater bridge inspection and meet or exceed the Association of Diving Contractors (ADC) Consensus Standards for Commercial Diving Operations. All divers and tenders will be ADC certified as demonstrated through appropriate ADC Certification Cards.
 - b. Equipment suitable for each Acoustic Field Team consisting of :

- Acoustic Imaging & Profiling system (inclusive of RTK positioning system and attitude and heading reference sensor)
- Deployment mechanism
- Deployment work platform (inclusive of maneuvering tug if platform needs to be a barge.
- Transport-survey vessel (boat).
- Equipment suitable to accommodate at least one DOTD bridge inspector at each bridge being inspected.

Certifications of Compliance must be submitted with and made part of the Consultants Standard Form 24-102 for all Personnel Requirements listed herein.

EVALUATION CRITERIA

The general criteria to be used by DOTD (when applicable) in evaluating responses for the selection of a Consultant to perform these services are:

1. Consultant's firm experience on similar projects, weighting factor of 3;
2. Consultant's personnel experience on similar projects, weighting factor of 4;
3. Consultant's firm size as related to the estimated project cost, weighting factor of 3; **
4. Consultant's past performance on similar DOTD projects, weighting factor of 6;
5. Consultant's current work load with DOTD, weighting factor of 5;
6. Location where the work will be performed, weighting factor of 4; *

* All respondents will receive a 4 in this category

** All respondents will receive no less than a 2 in this category.

Complexity Level (complex)

Consultants will be evaluated as indicated in Items 1- 6. The evaluation will be by means of a point-based rating system. Each of the above criteria will receive a rating on a scale of 0-4. The rating will then be multiplied by the corresponding weighting factor. The firm's rating in each category will then be added to arrive at the Consultant's final rating.

If Sub-Consultants are used, each member of the Consultant/Team will be evaluated on their part of the contract, proportional to the amount of their work. The individual team member ratings will then be added to arrive at the Consultant/Team rating.

Communication Protocol

DOTD's Project Evaluation Team will be responsible for performing the above described evaluation, and will present a short-list of the three (if three are qualified) highest rated Consultants to the Secretary of the DOTD. The Secretary will make the final selection. **Below are the proposed Team members. DOTD may substitute for any reason provided the members meet the requirements of R.S. 48:291.**

1. Debbie L. Guest – Ex officio
2. Haylye Brown – Project Manager
3. Steven Sibley
4. David Nash
5. Dennis Antee
6. Kevin Reed

Rules of Contact (Title 48 Engineering and Related Services)

These rules are designed to promote a fair, unbiased, legally defensible selection process. The LA DOTD is the single source of information regarding the Contract selection. The following rules of contact will apply during the Contract selection process and will commence on the date of advertisement and cease at the contract execution of the selected firm. Contact includes face-to-face, telephone, facsimile, Electronic-mail (E-mail), or formal written communications. Any contact determined to be improper, at the sole discretion of the LA DOTD, may result in the rejection of the submittal (SF 24-102):

- A. The Consultant shall correspond with the LA DOTD regarding this advertisement only through the LA DOTD Consultant Contracts Services Administrator;
- B. The Consultant, nor any other party on behalf of the Consultant, shall not contact any LA DOTD employees, including but not limited to, department heads; members of the evaluation teams; and any official who may participate in the decision to award the contract resulting from this advertisement except through the process identified above. Contact between Consultant organizations and LA DOTD employees is allowed during LA DOTD sponsored one-on-one meetings;
- C. Any communication determined to be improper, at the sole discretion of the LA DOTD, may result in the rejection of submittal, at the sole discretion of the LA DOTD;
- D. Any official information regarding the project will be disseminated from the LA DOTD'S designated representative on the LA DOTD website. Any official correspondence will be in writing;
- E. The LA DOTD will not be responsible for any verbal exchange or any other information or exchange that occurs outside the official process specified herein.

By submission of a response to this RFQ, the Consultant agrees to the communication protocol herein.

CONTRACT REQUIREMENTS

The selected Consultant will be required to execute the contract within 10 days after receipt of the contract.

INSURANCE - During the term of this contract, the Consultant will carry professional liability insurance in the amount of \$1,000,000. The Prime-Consultant may require the Sub-Consultant(s) to carry professional liability insurance. This insurance will be written on a “claims-made” basis. Prior to executing the contract, the Consultant will provide a Certificate of Insurance to DOTD showing evidence of such professional liability insurance.

AUDIT - The selected Consultant/Team will allow the DOTD Audit Section to perform an annual overhead audit of their books, or provide an *independent* Certified Public Accountant (CPA) audited overhead rate. This rate must be developed using Federal Acquisition Regulations (FAR) and guidelines provided by the DOTD Audit Section. In addition, the Consultant/Team will submit semi-annual labor rate information, when requested by DOTD.

The selected Consultant/Team will maintain an approved Project Cost System, and segregate direct from indirect cost in their General Ledger. Pre-award and post audits, as well as interim audits, may be required. For audit purposes, the selected Consultant/Team will maintain accounting records for a minimum of five years after final contract payment.

Any Consultant currently under contract with the DOTD and who has not met all the audit requirements documented in the manual and/or notices posted on the DOTD Consultant Contract Services Website (www.dotd.louisiana.gov), will not be considered for this project.

SUBMITTAL REQUIREMENTS

One original (**stamped “original”**) and **five** copies of the SF 24-102 must be submitted to DOTD. All submittals must be in accordance with the requirements of this advertisement and the Consultant Contract Services Manual. Any Consultant/Team failing to submit any of the information required on the SF 24-102, or providing inaccurate information on the SF 24-102, will be considered non-responsive.

Any Sub-Consultants to be used, including Disadvantaged Business Enterprises (DBE), in performance of this Contract, must also submit a SF 24-102, which is completely filled out and contains all information pertinent to the work to be performed.

The Sub-Consultant’s SF 24-102 must be firmly bound to the Consultant’s SF 24-102. In Section 9, the Consultant’s SF 24-102 must describe the **work elements** to be performed by the Sub-Consultant(s), and state the approximate **percentage** of each work element to be subcontracted to each Sub-Consultant.

Name(s) of the Consultant/Team listed on the SF 24-102, must precisely match the name(s) filed with the Louisiana Secretary of State, Corporation Division, and the Louisiana State Board of Registration for Professional Engineers and Land Surveyors.

The SF 24-102 will be identified with **Contract No. 4400001461**, and will be submitted **prior to 3:00 p.m. CST on Tuesday, April 26, 2011**, by hand delivery or mail, addressed to:

Department of Transportation and Development
Attn.: Ms. Debra L. Guest, P.E.
Contracts Administrator
1201 Capitol Access Road, **Room 405-T**
Baton Rouge, LA 70802-4438 or
Telephone: (225) 379-1889

REVISIONS TO THE RFQ

DOTD reserves the right to revise any part of the RFQ by issuing an addendum to the RFQ at any time. Issuance of this RFQ in no way constitutes a commitment by DOTD to award a contract. DOTD reserves the right to accept or reject, in whole or part, all Qualification Statements submitted, and/or cancel this announcement if it is determined to be in DOTD's best interest. All materials submitted in response to this announcement become the property of DOTD, and selection or rejection of a submittal does not affect this right. DOTD also reserves the right, at its sole discretion, to waive administrative informalities contained in the RFQ.